

CLINICAL IMAGES

Piezogenic pedal papules

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A 56-year-old woman was concerned about multiple, enlarging, painless bumps that had been appearing on both of her heels for the past 8 months. The bumps appeared only when she stood and disappeared immediately upon sitting.

On examination, the papules were round, skin-coloured and compressible, about 0.2–1.2 cm in diameter, appearing over the lateral and medial aspects of both heels (Figure 1). The patient had no personal or family history of connective tissue disorder.

Because the papules were enlarging and multiplying, we decided to perform a biopsy. Histology showed compact hyperkeratosis with an encapsulated fatty nodule protruding into the dermis (Appendix 1, available at www.cmaj.ca/lookup/suppl/doi:10.1503/cmaj.121963/-/DC1). The subcutaneous fat showed a loss of compartmentalization, likely related to thinning of the connective tissue trabeculae (Appendix 2, available at www.cmaj.ca/lookup/suppl/doi:10.1503/cmaj.121963/-/DC1). We diagnosed piezogenic pedal papules and reassured our patient.

Piezogenic pedal papules are clinically diagnosed. The papules appear during weight-bearing in up to 60% of the general population, most commonly over the medial aspect of the heel.^{1,2} Fewer than 10% of cases become painful, with most remaining asymptomatic.³ In people with hereditary connective tissue diseases such as Ehlers–Danlos syndrome, the papules tend to be larger and more numerous. The lesions arise from herniations of subcutaneous fat through connective tissue defects. Pain is attributed to ischemia caused by the extrusion of fat with its vasculature and associated nerves.³

Nonpainful piezogenic pedal papules are managed conservatively. For painful papules, management includes avoiding standing for prolonged periods, reducing foot trauma, using compression stockings and heel cups, weight loss, acupuncture, repeated injections of betamethasone and bupivacaine and, very rarely, surgery.^{3,4}



Figure 1: Photograph showing multiple soft, round, compressible, smooth skin-colored papules (diameter 0.2–1.2 cm) on the medial aspect of the left heel of a 56-year-old woman.

References

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